

Abstract

The present invention shows a circuit that provides a power regulation loop that operates in two modes and uses a single comparator between the two modes. One mode, an open mode, involves generating an overload signal when the pass
5 transistor is in an oversaturated mode indicating that the voltage drop of the device exceeds a predetermined threshold. The other mode, a linear mode, involves generating an optimal value sense resistor for a liner mode operation of a pass transistor. The two modes do not exist simultaneously and, therefore, a single comparator may be used between the two modes.

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